

Trends in Digital Adoption for Enhancing the Global Performance of SMEs: a Bibliometric Analysis

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ABSTRACT

Small and medium-sized enterprises (SMEs) play a vital role in the global economy. However, increasing market dynamism has pushed many businesses to move away from traditional approaches and adopt digitalization to enhance their competitiveness. This study aims to map, identify patterns, and analyze the development of literature related to the adoption of digitalization in the behavior, capabilities, and performance of SMEs on a global scale. Relevant articles were retrieved from the Scopus database, covering the period from 2020 to 2025, resulting in 154 documents filtered based on specific criteria. These articles were classified and visualized using the VOSviewer software. The study explores research trends based on documents, authors, sources, and analyzes bibliographic coupling. The findings provide a systematic overview of thematic focuses, interconnections among studies, and potential research gaps in the literature on SME digitalization, which offering a solid foundation for future research in the field of global digital business strategy.

Keywords: SMEs, digitalization, business performance, internationalization, bibliometric analysis

ABSTRAK

Usaha kecil dan menengah (UKM) memainkan peran penting dalam ekonomi global. Namun, meningkatnya dinamisme pasar telah mendorong banyak bisnis untuk menjauh dari pendekatan tradisional dan mengadopsi digitalisasi untuk meningkatkan daya saing mereka. Penelitian ini bertujuan untuk memetakan, mengidentifikasi pola, dan menganalisis perkembangan literatur terkait adopsi digitalisasi dalam perilaku, kapabilitas, dan kinerja UKM dalam skala global. Artikel yang relevan diambil dari database Scopus, yang mencakup periode 2020 hingga 2025, menghasilkan 154 dokumen yang disaring berdasarkan kriteria tertentu. Artikel-artikel ini diklasifikasikan dan divisualisasikan menggunakan perangkat lunak VOSviewer. Studi ini mengeksplorasi tren penelitian berdasarkan dokumen, penulis, sumber, dan analisis kopling bibliografi. Temuan ini memberikan gambaran sistematis tentang fokus tematik, interkoneksi antar studi, dan potensi kesenjangan penelitian dalam literatur tentang digitalisasi UKM, yang menawarkan dasar yang kuat untuk penelitian masa depan di bidang strategi bisnis digital global.

Kata kunci: UKM, digitalisasi, kinerja bisnis, internasionalisasi, analisis bibliometrik

INTRODUCTION

The presence of small and medium-sized enterprises (SMEs) in the global business landscape continues to grow. SMEs play a crucial role due to their significant

contributions to the economy and their involvement across various sectors (Savlovschi & Robu, 2011). Their existence is considered essential as they provide wide-ranging positive impacts on a country's economic development (Febrianto et al., 2023). The shift of SMEs towards the use of digital technologies has opened substantial opportunities for business sustainability (Belas et al., 2025). The adoption of digital tools such as e-commerce platforms, digital payment systems, and technology-based media.

In developing countries, SMEs are often viewed as the backbone of inclusive and sustainable economic development. However, in practice, many SMEs still face challenges in adapting swiftly to rapid technological advancements. Limitations in resources such as finance, knowledge, and infrastructure which can prevent the digital transformation process. Nevertheless, digital technology offers dynamic growth potential for SMEs if adopted consistently by business actors, thereby enhancing competitiveness and performance at both local and global scales (Nambisan, 2017). In this context, digital capabilities can streamline operations, expand market reach and connections, improve customer engagement on an international scale, and foster innovation and knowledge adoption.

Therefore, understanding trends in digital technology adoption and its impact on SME performance is essential to support effective and sustainable transformation. Given the growing volume of research on SME digitalization, systematic mapping is needed to provide a comprehensive understanding of the literature's evolution in this field. A bibliometric approach serves as an effective method to identify dominant trends, influential publications, geographic distribution, key thematic focuses, and potential research gaps that remain underexplored.

Bibliometric analysis is an effective approach for examining the development of scientific literature, identifying research trends, and determining major contributions within a particular discipline (Zupic & Čater, 2015). In the context of digital adoption in SMEs, bibliometric analysis helps evaluate how the topic has evolved over time by identifying key researchers, contributing institutions, collaboration patterns, and co-citation networks (Donthu, 2021). This study employs a bibliometric analysis of the global literature on digitalization adoption and SME performance. The objective is to identify major research trends, the evolution of the literature, and existing research gaps. The analysis focuses on evaluating author productivity, publication trends, and frequently used keywords in the existing body of work. VOSviewer is used to visualize the data obtained from the selected database. The findings are expected to illustrate emerging research trends related to the topic and serve as a reference for both researchers and practitioners in understanding the dynamics of digitalization trends and their impact on SME performance at the global level.

METHOD

Data Collection and Sources

This study adopts a bibliometric analysis approach. In bibliometric research, Scopus and Web of Science (WoS) are widely regarded as the most reliable online databases for this type of analysis (Sánchez et al., 2017). For this study, the Scopus database was selected due to its broad coverage and relevance (Ng, 2022). Keywords used to extract relevant publications related to the adoption of digitalization and SME performance in a global context were adapted from (Sabando-Vera et al., 2025), (Castilla-Polo & Sánchez-Hernández, 2025), and (Marino-Romero et al., 2024). The metadata was retrieved using the following keywords "Small business" OR "medium business" OR "small-sized firm" OR "medium-sized firm" OR "small and medium-sized business" OR "SME" OR "SMEs" OR "small firm" OR "medium firm" OR "small enterprise*" OR "medium enterprise*" OR "and medium enterprise*" OR "small and medium-sized enterprise*" AND "digital technology*" OR "digital capability*" AND "Global*" OR "International***", searched within the TITLE-ABS-KEY fields. This resulted in approximately 160 documents.

The documents were filtered based on the publication year (2020–2025), subject areas (Business, Management and Accounting; Economics, Econometrics and Finance), and limited to English-language and open-access publications, with no restrictions on document type. After reviewing titles and abstracts, 154 relevant documents were selected. The filtered Scopus data was then analyzed using VOSviewer to visualize research trends, developments, and contributions related to the digitalization trends in SME performance on a global scale.

Bibliometric Method

Microsoft Excel was used to summarize bibliometric parameters such as the number of documents, abstracts, publication types, publication years, keywords, authors, sources, and countries. Most bibliometric studies adopt these standard parameters (Atsız et al., 2022). In addition, citation analysis, co-citation analysis, co-authorship analysis, keyword co-occurrence analysis, and bibliographic coupling were employed to determine the relationships between bibliographic items (such as keywords, documents, authors, sources, countries, and others).

The results were visualized in the form of network maps using VOSviewer (version 1.6.18). VOSviewer was chosen due to its strong visualization capabilities and user-friendly interface (Van Eck & Waltman, 2010). In the network maps, nodes represent bibliographic items that are connected by lines indicating the strength of their relationships (Cobo et al., 2011). Based on similarity levels, items are grouped into several clusters, each represented by a different color (Van Eck & Waltman, 2010).

RESULTS AND DISCUSSION

Overview

The number of publications discussing digital adoption among SMEs has shown a fluctuating increase. The highest number of publications was recorded in 2024, with a total of 54 documents (*Figure 1*), and it is likely to increase significantly in 2025. Research on this topic began to emerge in 2020, as evidenced by 21 relevant articles published that year, addressing the digitalization of SMEs and its development in the context of internationalization.

Among the collected documents, the most common type of publication was journal articles (n = 94; 61%), followed by review articles (n = 33; 22%), conference papers (n = 21; 14%), and others with a 3% share. According to (*Table 1*), which presents the top 10 most-cited sources, Technology Innovation Management Review ranks first, contributing 4 documents with a total of 289 citations. This is followed by the Journal of Small Business and Entrepreneurship, which contributed 2 documents with approximately 251 citations. In third place is the International Journal of Information Management, which produced 3 documents and 239 citations. These rankings are based on citation analysis by source area, as visualized and interpreted using VOSviewer (*Table 1*).

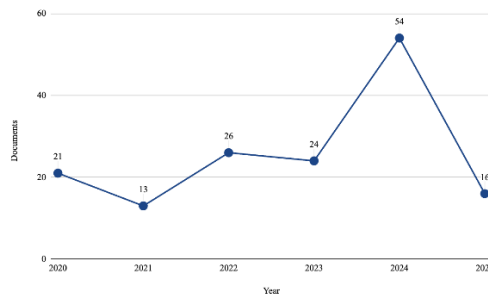


Figure 1. Publication Trends on SME Digitalization on Global Performance (2020-2025)

Source: Database Scopus, 2025

Table 1. Source Areas of Publication Trends Based on Citation Counts

Rank	Source Area*	Number of Documents	Number of Citation
1	Technology Innovation Management Review	4	289
2	Journal of Small Business and Entrepreneurship	2	251
3	International Journal of Information Management	3	239
4	International Marketing Review	3	167
5	Industry and Innovation	2	164

6	Technological Forecasting and Social Change	2	94
7	Journal of Innovation and Knowledge	2	82
8	Proceedings of the International Conference on Industrial Engineering and Operations Management	2	8
9	Scientific Bulletin of Mukachevo State University. Series Economics	2	7
10	Financial and Credit Activity: Problems of Theory and Practice	3	5

(Note*: The minimum contribution threshold for documents is set at 2)

Keyword

There are 659 keywords extracted from the database based on the input keywords in Scopus from 2020 to 2025. Using a minimum occurrence threshold of 5 for co-occurrence keyword analysis, 22 keywords met the criteria (Table 2). Cluster 1 consists of 7 keywords, including COVID-19, digital economy, digital entrepreneurship, digital marketing, digital transformation, small and medium enterprise, and small-and-medium enterprise, representing the theme of "digital transformation during the pandemic." Cluster 2 contains 7 keywords, such as digital technology, digitalization, industry 4.0, internationalization, SME, SMEs, representing "global digitalization." Cluster 3 includes 5 keywords, among them digital technologies, digitization, entrepreneurship, innovation, small and medium-sized enterprise, representing "SMEs innovation." Cluster 4 comprises 4 keywords, including digitalization, dynamic capabilities, entrepreneurial orientation, internationalization, representing "dynamic capabilities." (Figure 2).

Table 2. Number of Co-occurrence based on Keyword

Rank	Keyword*	Number of occurrences
1	Digital technologies	34
2	Digital transformation	28
3	Smes	27
4	Digitalization	19
5	Covid-19	15
6	Digital technology	15
7	Internationalization	11
8	Industry 4.0	10
9	Small-and-medium enterprise	9
10	Small and medium-sized enterprise	9
11	Innovation	9

12	Internationalisation	9
13	Innovation	9
14	Sme	8
15	Small and medium enterprises	8
16	Dynamic capabilities	7
17	Digitization	6
18	Sustainability	5
19	Digital economy	5
20	Digital marketing	5
21	Digital entrepreneurship	5
22	Digitalization	5
23	Entrepreneurial orientation	5

Source: Scopus Database, 2025

(Note*: Keywords are shown based on a minimum threshold of five occurrences)

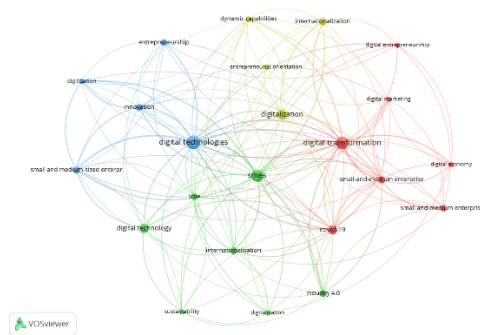


Figure 2. Network Map Based on the Keyword Co-occurrence

Document

The filtered Scopus database yielded 154 documents, from which the top 10 most-cited research articles were identified. Using VOSviewer with a minimum citation threshold of 73 at the document level, these 10 documents were extracted. As shown in (

Table 3), three articles received over 200 citations each. These articles contribute to the literature on digitalization, technology adoption, and their relevance to SMEs.

The most-cited document (244 citations) is from the Journal of Business Research in China, titled “The digitalization and public crisis responses of small and medium enterprises: Implications from a COVID-19 survey” (Guo et al., 2020). This study illustrates how SMEs coped with the crisis during the COVID-19 pandemic. It highlights dynamic capabilities relevant for adoption by certain communities, such as SMEs in China. The paper integrates topics of digitalization, SMEs, and crisis resilience, which likely contributed to its high citation count as it addressed a timely and globally disruptive issue.

The second most-cited article, with 240 citations, is “*Resources and digital export: An RBV perspective on the role of digital technologies and capabilities in cross-border e-commerce*” by (Elia et al., 2021). This research applies a resource-based view (RBV) framework to explore the role of digital technologies in international business, specifically cross-border e-commerce. It expands the discussion on digitalization and SME internationalization, reflecting the growing importance of digital export strategies. The article’s focus on exports, e-commerce, strategy, and SMEs explains its significant citation impact.

The third highly cited article, also with 240 citations, is titled “*Small business awareness and adoption of state-of-the-art technologies in emerging and developing markets, and lessons from the COVID-19 pandemic.*” This study concentrates on developing countries and highlights the digital adoption gap, drawing attention to inclusivity and digital transformation issues, which contributed to its high citation volume.

Table 3. Most Cited Document

<i>Ran k</i>	<i>Documents</i>	<i>Authors</i>	<i>Year</i>	<i>Source</i>	<i>Cited by</i>
1	The digitalization and public crisis responses of small and medium enterprises: Implications from a COVID-19 survey	Guo H.; Yang Z.; Huang R.; Guo A.	2020	Journal of Business Research in China	244
2	Resources and digital export: An RBV perspective on the role of digital technologies and capabilities in cross-border e-commerce	Elia S.; Giuffrida M.; Mariani M.M.; Bresciani S.	2021	Journal of Business Research	240
3	Small business awareness and adoption of state-of-the-art technologies in emerging and developing markets, and lessons from the COVID-19 pandemic	Akpan I.J.; Udoh E.A.P.; Adebisi B.	2022	Journal of Small Business and Entrepreneurship	240
4	Digital transformation and European small and medium enterprises (SMEs): A comparative study using digital economy and society index data	Skare M.; de las Mercedes de Obesso M.; Ribeiro-Navarrete S.	2023	International Journal of Information Management	195

5	The relationship between digital technologies and internationalisation. Evidence from Italian SMEs	Cassetta E.; Monarca U.; Dileo I.; Di Berardino C.; Pini M.	2020	Industry and Innovation	164
6	The adoption of Industry 4.0 technologies in SMEs: results of an international study	Agostini L.; Nosella A.	2020	Management Division	151
7	Digital marketing capabilities in international firms: a relational perspective	Wang F.	2020	International Marketing Review	120
8	Digitalization and SMEs' export management: Impacts on resources and capabilities	Dethine B.; Enjolras M.; Monticolo D.	2020	Technology Innovation Management Review	103
9	Can Supply Chain Finance help mitigate the financial disruption brought by Covid-19?	Moretto A.; Caniato F.	2021	Journal of Purchasing and Supply Management	87
10	Digitalization, internationalization and scaling of online SMEs	Westerlund M.	2020	Technology Innovation Management Review	73

Source: Scopus Database, 2025

Author

The Scopus database indicates that 441 authors have contributed to the research documents on this topic. Based on the (Table 4), it highlights the leading authors with the highest citation counts. These three authors have co-authored several key articles. The first article, titled “*Internationalization and Digitalization: Applying digital technologies to the internationalization process of small and medium-sized enterprises,*” was published in 2020. The second article, “*Digitalization, entrepreneurial orientation and internationalization of micro-, small- and medium-sized enterprises,*” was also published in 2020. The third article, “*Digitalization and internationalization of micro-, small, and medium-sized enterprises: An overall conceptual process,*” was published in 2022. These three articles collectively, with approximately 118 citations, reflect the discussion of SMEs in the context of internationalization, each employing different research approaches. Based on the mapping visualization generated by VOSviewer (Figure 3), potential research gaps can be identified, offering opportunities for novel contributions in future studies.

Table 4. Most Cited Authors

<i>Author*</i>	<i>Document</i>	<i>Citations</i>
Baldegger, Rico	3	118
Hervé, Annaële	3	118
Schmitt, Christophe	3	118

Source: Scopus Database, 2025

(Note*: Author are included with a minimum threshold of three published documents)

baldegger,rico

VOSviewer

herve@naale

Figure 3. Most Cited Authors from Network Map

Source Area

Based on (Table 5), the results of the document analysis by unit of analysis show the sources with the highest number of documents and citations. There are three source areas with total citations exceeding 100, namely Technology Innovation Management Review, International Journal of Information Management, and International Marketing Review. The Technology Innovation Management Review ranks first with 4 documents and 289 citations. VOSviewer visualizes these sources into several clusters. Cluster 1 consists of the International Journal of Information Management and Lecture Notes in Information Systems and Organization. Cluster 2 includes International Marketing Review and Technology Innovation Management Review. Cluster 3 contains the Springer Proceedings in Business and Economics. According to the overlay visualization, the average publication years for sources in Cluster 1 range from 2022 to 2023. Documents in Cluster 2 were mostly published between 2020 and 2022, while Cluster 3 contains documents from 2023 originating from the Springer Proceedings in Business and Economics (Figure 4).

Table 5. Most Productive Source Area

<i>Source Area*</i>	<i>Documents</i>	<i>Citations</i>
Technology Innovation Management Review	4	289
International Journal of Information Management	3	239

International Marketing Review	3	167
Financial and Credit Activity: Problems of Theory and Practice	3	5
Lecture Notes in Information Systems and Organisation	5	4
Studies in Systems, Decision and Control	3	3
Springer Proceedings in Business and Economics	5	2

Source: Scopus Database, 2025

(Note*: Source areas are displayed with a minimum of three documents per source)

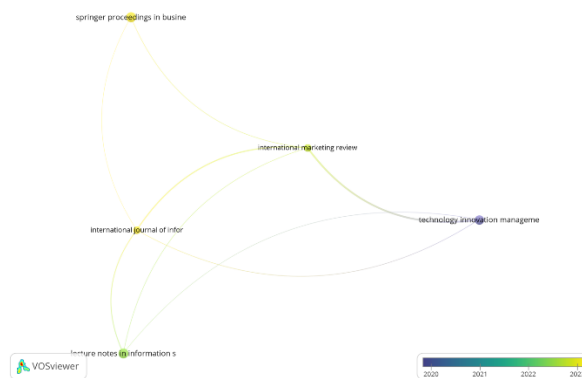


Figure 4. Source Area from The Overlay Visualization

Bibliographic coupling analysis

Based on (

Table 6), this mapping outlines the themes investigated within the relevant field, thereby revealing prevailing research trends. The unit of analysis used is the document, with a minimum citation threshold of 50 citations per document. From the total of 154 documents, 15 relevant documents were identified and classified into distinct clusters.

Table 6. Cluster Mapping Based on Bibliographic Coupling

Authors	Documents	Source	Year of Publication	Cluster	Citations
Chatterjee, Sheshadri; Chaudhuri, Ranjan; Vrontis, Demetris; Thrassou, Alkis	Sme entrepreneurship and digitalization - the potentialities and moderating role of demographic factors	Technological forecasting and social change, 179	2022	1	72
Elia, Stefano; Giuffrida, Maria; Mariani,	Resources and digital export: an rv perspective on the role	Journal of business research, 132,	2021	1	240

Marcello M.; Bresciani, Stefano	of digital technologies and capabilities in cross-border e-commerce	158-169			
Reim, Wiebke; Yli-Viitala, Pirjo; Arrasvuori, Juha; Parida, Vinit	Tackling business model challenges in SME internationalization through digitalization	Journal of innovation and knowledge, 7(3)	2022	1	72
Skare, Marinko; De Las Mercedes De Obesso, María; Ribeiro-Navarrete, Samuel	Digital transformation and European small and medium enterprises (SMES): a comparative study using digital economy and society index data	International journal of information management, 68	2023	1	195
Westerlund, Mika	Digitalization, internationalization and scaling of online SMES	Technology innovation management review, 10(4), 48-57	2020	1	73
Agostini, Lara; Nosella, Anna	The adoption of 4.0 technologies in SMES: results of an international study	Management decision, 58(4), 625-643	2020	2	151
Akpan, Ikpe Justice; Udoh, Elijah Abasifreke Paul; Adebisi, Bamidele	Small business awareness and adoption of state-of-the-art technologies in emerging and developing markets, and lessons from the covid-19 pandemic	Journal of small business and entrepreneurs hip, 34(2), 123-140	2022	2	240
Cassetta, Ernesto; Monarca, Umberto; Ivano; Berardino, Claudio; Pini, Marco	The relationship between digital technologies and internationalization. evidence from Italian SMES	Industry and innovation, 27(4), 311-339	2020	2	164

Dethine, Benjamin; Enjolras, Manon; Monticolo, Davy	Digitalization and SMES export management: impacts on resources and capabilities	Technology innovation management review, 10(4), 18-34	2020	2	103
Dilyard, John; Zhao, Shasha; You, Jacqueline Jing	Digital innovation and industry 4.0 for global value chain resilience: lessons learned and ways forward	Thunderbird international business review, 63(5), 577-584 Year: 2021	2021	3	61
Guo, Hai; Yang, Zhuen; Huang, Ran; Guo, Anqi	The digitalization and public crisis responses of small and medium enterprises: implications from a covid-19 survey	Frontiers of business research in China, 14(1)	2020	3	244
Oliveira, Luis; Fleury, Afonso; Fleury, Maria Tereza	Digital power: value chain upgrading in an age of digitization	International business review, 30(6)	2021	3	71
Wang, Fatima	Digital marketing capabilities in international firms: a relational perspective	International marketing review, 37(3), 559-577	2020	3	120
Hervé, Annaële; Schmitt, Christophe; Baldegger, Rico	Internationalization and digitalization: applying digital technologies to the internationalization process of small and medium-sized enterprises	Technology innovation management review, 10(7), 28-40	2020	4	60
Hervé, Annaële; Schmitt, Christophe; Baldegger, Rico	Digitalization, entrepreneurial orientation and internationalization of micro-, small- and medium-sized enterprises	Technology innovation management review, 10(4), 5-17	2020	4	53

Source: Data processed by the author using VOSviewer, 2025

Cluster 1 consists of 5 documents with nodes colored in red (*Figure 5*), indicating a strong central theme focused on the digitalization and internationalization of SMEs within the context of globalization and digital transformation. This cluster represents a body of literature exploring how digital technologies drive competitiveness, cross-border expansion, and the adoption of innovation in SME business models. The five articles primarily focus on digital transformation as a key driver of SME growth and expansion.

The study by (Chatterjee et al., 2022) highlights the potential of digitalization in SME entrepreneurship and emphasizes the moderating role of demographic factors, finding that the impact of digitalization largely depends on the characteristics of business actors. Meanwhile, (Elia et al., 2021) examine the resource-based view perspective by exploring the role of digital technologies and capabilities in supporting cross-border digital exports. (Reim et al., 2022) complement this discussion by focusing on business model challenges, emphasizing the need to adapt processes or business models to remain relevant in global markets. (Skare et al., 2023), using a quantitative approach, demonstrate how SMEs across various European countries are coping with digitalization. Additionally, (Westerlund, 2020) highlights how digital platforms provide rapid expansion opportunities for traditional SMEs.

Cluster 2 demonstrates a consistent focus on the adoption of digital technologies and their impact on SMEs. This cluster emphasizes technological readiness, export strategies, and developing country markets. (Agostini & Nosella, 2020), in their article, identify internal and external factors influencing SMEs' decisions to adopt advanced technologies and highlight adoption gaps across countries and industry sectors. The cluster also highlights perspectives on developing markets, emphasizing how awareness and adoption of digital technologies among SMEs in developing countries were influenced by COVID-19 (Akpan et al., 2022). Meanwhile, (Cassetta et al., 2020) find that the use of digital technologies can strengthen SMEs' international competitiveness, particularly in operational efficiency and access to global markets. (Dethine et al., 2020) focus on how digitalization affects SME export management through the transformation of resources and organizational capabilities, and how technology supports strategic decision-making in export activities. This cluster, represented by green nodes (*Figure 5*), illustrates research on SME digital transformation as an adaptive process to external challenges and internationalization opportunities. Additionally, it shows a strong focus on the internal dynamics of SMEs in responding to and leveraging digitalization as a tool for survival, growth, and expansion.

Cluster 3 generally addresses issues such as crisis response, capability enhancement, global value chains, and digital transformation in the context of international marketing. (Dilyard et al., 2021) highlight the role of digital innovation and Industry 4.0 adoption in strengthening the resilience of global supply chains against disruptions like the pandemic. (Guo et al., 2020) emphasize digitalization as a dynamic response to external uncertainties and a pathway toward business efficiency and continuity. (Oliveira et al., 2021) discuss the power of digitalization in enabling

firms to improve their position within global value chains through product innovation and cross-border digital integration. These studies illustrate how digitalization supports value chain upgrading within globalization. Meanwhile, (Wang, 2020) stresses that digital marketing capabilities are not only crucial for building customer relationships but also play a key role in strategic decision-making related to internationalization and global competitiveness. The interconnectedness of documents in this cluster primarily focuses on comprehensive adaptive strategies amid global dynamics, crises, and cross-border integration

The last cluster is Cluster 4 which represented by yellow nodes (*Figure 5*), analyzes the relationship between digitalization and the internationalization process of SMEs, particularly focusing on entrepreneurial orientation and digital strategy. (Hervé et al., 2021) emphasize that digitalization is not merely a tool for operational efficiency but also a crucial component of business expansion strategies on a global scale. In their article titled “*Digitalization, entrepreneurial orientation and internationalization of micro-, small- and medium-sized enterprises,*” (Hervé et al., 2021) highlight that the combination of an entrepreneurial mindset and digital capabilities is a key driver for SMEs, especially micro and small enterprises. This article also discusses the role of risk-taking in strengthening the effectiveness of digitalization within the internationalization process. These two closely related articles not only share authorship but also provide significant theoretical contributions regarding digitalization strategies adopted by entrepreneurs. Consequently, this aspect distinguishes Cluster 4 from other clusters that tend to emphasize technology, crisis management, or value chain issues.

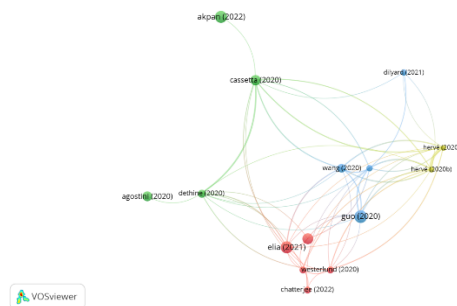


Figure 5. Network Map of Bibliograph Coupling of Documents

CONCLUSION AND SUGGESTIONS

Based on the network mapping and analysis of each unit, it can be concluded that the two disciplines, namely “*digitalization*” and “*SME performance on a global scale,*” have a strong interconnection and mutually influence the development of research across entrepreneurship, international business, and technology adoption strategies. Several documents visualized through VOSviewer highlight trends in internationalization and the strategic adoption of digital tools that impact entrepreneurial behavior and company strategies. On the other hand, the frequent

appearance of digitalization in this analysis tends to focus on the relationship between strategy and marketing resulting from such adoption. This can serve as a valuable reference for future research, considering the various technologies and their utilities that will significantly affect entrepreneurs by disrupting traditional approaches and playing a crucial role in cross-border expansion. Therefore, the relevance of the themes “digital adoption” and “SME internationalization” warrants deeper investigation, supported by theoretical novelty, to better understand their influence on SME performance globally.

Additionally, there are several limitations in this study that can serve as references or guidelines for future research. First, although Scopus is one of the largest bibliographic databases, the documents indexed depend on its coverage and scope, which may introduce potential bias. Future studies are encouraged to expand the scope of database analysis beyond Scopus, including databases such as Web of Science (WoS), Google Scholar, PubMed, IEEE Xplore, and others. Second, the current data retrieval focused only on two subject areas, the first area were Business, Management, and Accounting, and the second area were Economics, Econometrics, and Finance. Subsequent research should consider incorporating related fields, especially those concerning technology, to broaden and enrich the analysis. Third, this study covers influential keywords and documents published between 2020 and 2025, which may exclude relevant works published before 2020. Moreover, the database included documents regardless of type. Future research is recommended to enhance bibliometric analysis by complementing it with qualitative analysis to clarify the research context and content more thoroughly.

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